

SAFETY AND BUILDINGS DIVISION
Plumbing Product Review
P.O. Box 2658
Madison, Wisconsin 53701-2658
TTY: Contact Through Relay

Scott Walker, Governor Dave Ross, Secretary

September 13, 2012

3M PURIFICATION INCORPORATED KAREN CARTER 400 RESEARCH PARKWAY MERIDEN CT 06450

Re: Description: WATER TREATMENT DEVICE - POU ACTIVATED CARBON

Manufacturer: 3M PURIFICATION INCORPORATED

Product Name: WATER FACTORY SYSTEMS

Model Number(s): FM-1200 USING THE 47-921601 CARTRIDGE

Product File No: 20120328

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of September 2017.

This approval is contingent upon compliance with the following stipulation(s):

- This product has undergone sufficient testing to document the product's ability to reduce only those
 contaminants and/or substances as specified in this approval letter when the product is installed and
 maintained in strict accordance with the manufacturer's published instructions.
- Where the Department of Natural Resources (DNR) has jurisdiction, a written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 267-9787.
- If this approved device is modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- These devices will only reduce the concentration of cysts/oocysts at water outlets that are served by the devices. Therefore, using point-of-use devices such as these will not protect all routes of potential exposure. Potentially hazardous exposures to cysts/oocysts will remain possible at unprotected outlets.

The presence of cysts/oocysts strongly suggests that other pathogens (e.g. bacteria, virus) may also be present.

If, by way of reputable water analyses, a water supply is known to contain cysts/oocysts, then all the water entering the residence must be treated at the point-of-entry, using an approved water treatment device, to address all potential routes of exposure thereby providing a biologically safe water supply.

• If the treatment components of this device (e.g., replacement cartridge) are replaced with anything other than those originally approved for use with this device, then this approval shall immediately be considered null and void.

SBD-10564-E (N.10/97) File Ref: 12032801.DOC

3M Purification Incorporated September 13, 2012

Page 2 of 3

Product File No.: 20120328

TABLE 1 OF 3 PRODUCT FILE NUMBER 20120328 HEALTH EFFECTING MICROBIOLOGICAL CONTAMINANT REDUCTION CAPABILITIES

Flow Rate: 2.3 lpm (0.6 gpm)

Capacity: dependent on the type and quantity of particulate matter present in the influent water, the need

for maintenance may be indicated by a significant decrease in flow rate.

Tested Contaminant	Influent Challenge Level (#/ml)
C. parvum oocysts	≥ 50,000

Other conditions: the contaminant reduction performance data for table 1 of 3 was generated by testing conducted in accordance with NSF *International* Standard 53. To comply, the device must reduce at least 99.95 percent of the influent C. parvum oocysts to qualify the device for the reduction of oocysts of Cryptosporidium and Toxoplasma and cysts of Giardia and Entamoeba.

#/ml = number per milliliter

≥ = greater than or equal to

TABLE 2 OF 3 PRODUCT FILE NUMBER 20120328 HEALTH EFFECTING INORGANIC CONTAMINANT REDUCTION CAPABILITIES

Flow Rate: 2.3 lpm (0.6 gpm)

Capacity: 4,543 I (1,200 gals.) for lead and mercury reduction. For asbestos reduction,

dependent on the type and quantity of particulate matter present in the influent water, the

need for maintenance may be indicated by a significant decrease in flow rate.

Tested Contaminant	Influent Challenge Level (mg/l) ^{3, 1}
Asbestos fibers	10 ⁶ to 10 ⁷ F/I
Lead (Pb ⁺²) ²	0.15 ± 10%

Other conditions: the contaminant reduction performance data displayed for table 2 of 3 was generated by testing conducted in accordance with NSF *International* Standard 53. To qualify for asbestos reduction, the device must reduce the influent asbestos fiber concentrations by \geq 99%; the asbestos reduction is only for fibers exceeding 10 μ m in length. To qualify for lead reduction, the devices must reduce the influent challenge concentrations such that all effluent concentrations are \leq 0.01 mg/l.

1 = milligrams per liter (mg/l) are equivalent to parts per million (ppm)

F/I = fibers per liter

 $\mu m = \text{micrometers}$

* = unless otherwise indicated

± = plus or minus

2 = metals are tested at pH 6.5 and pH 8.5

TABLE 3 OF 3 PRODUCT FILE NUMBER 20120328 AESTHETICS EFFECTING INORGANIC CONTAMINANT REDUCTION CAPABILITIES

Flow Rate: 2.3 lpm (0.6 gpm)

Capacity: 4,543 I (1,200 gals.) for free chlorine reduction performance. For particulate

reduction, the capacity is dependent on the type and quantity of particulate matter present in the influent water, the need for maintenance may be indicated by a significant decrease in

flow rate.

Tested Contaminant	Influent Challenge Level (mg/l)
Chlorine (free)	2.0 ± 0.2
Particles (0.5 - < 1.0 μm)	≥ 10,000 #/ml

Other conditions: the contaminant reduction performance data displayed for table 3 of 3 was generated by testing conducted in accordance with NSF *International* Standard 42. To qualify for free chlorine reduction, the device must reduce the influent challenge concentrations by \geq 50%; meeting the free chlorine reduction requirements also qualifies the device for the reduction of aesthetic, organic, taste and

3M Purification Incorporated September 13, 2012 Page 3 of 3 Product File No.: 20120328 (continued from previous page)

odor reduction (e.g. geosmin, methylisoborneol); this does not include hydrogen sulfide. To qualify for particulate reduction, the device must reduce the influent particulate concentrations by \geq 85%.

mg/l = milligrams per liter are equivalent to parts per million (ppm)

* = unless otherwise indicated

 \pm = plus or minus

 \geq = greater than or equal to

μm = micrometers #/ml = particles per milliliter < = less than

Based on testing data submitted to and reviewed by the department, this approval recognizes that this plumbing product will reduce the concentration of contaminants as specified on pages 1 through 3 of this letter.

This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter
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